

# PRACE support to mitigate impact of COVID-19 pandemic

## Fast Track Call for Proposals

## 1 Scope

PRACE is welcoming project proposals requesting computing resources to contribute to the mitigation of the impact of the COVID-19 pandemic. This applies, without being exhaustive, to the following topics:

- Biomolecular research to understand the mechanisms of the virus infection
- Bioinformatics research to understand mutations, evolution, etc.
- Bio-simulations to develop therapeutics and/or vaccines
- Epidemiologic analysis to understand and forecast the spread of the disease
- Other analyses to understand and mitigate the impact of the pandemic

This call for proposals will follow a fast track review process to provide swift feedback to the applicants.

This call is open until further notice. Applications are evaluated within one week and start as soon as possible if awarded.

## 2 Who can apply and what can you apply for?

Researchers from academia, from research institutes, and from commercial organisations (industry) based in Europe are eligible to apply.

Awardees in this call commit to publish the outcome of their project as preprint and as soon as possible, to make the data available following open data policy, and to acknowledge the use of the corresponding resources and the PRACE RI.

They can apply for resources offered by PRACE on the following systems:

- Joliot-Curie, Bull Sequana X1000 / XH2000, GENCI@CEA, France <a href="http://www-hpc.cea.fr/en/complexe/tgcc-JoliotCurie.htm">http://www-hpc.cea.fr/en/complexe/tgcc-JoliotCurie.htm</a>
- HAWK, HPE Apollo, GCS@HLRS, Germany <u>https://www.hlrs.de/systems/hpe-apollo-hawk/</u>
- JUWELS, BULL Sequana X1000 / XH2000, GCS@JSC, Germany <a href="https://www.fz-">https://www.fz-</a>
  - juelich.de/ias/jsc/EN/Expertise/Supercomputers/JUWELS/JUWELS\_node.html
- SuperMUC-NG, Lenovo ThinkSystem, GCS@LRZ, Germany https://doku.lrz.de/display/PUBLIC/SuperMUC-NG
- Marconi 100, IBM Power 9 AC922 Whiterspoon, CINECA, Italy https://wiki.u-gov.it/confluence/display/SCAIUS/UG3.0%3A+System+Specific+Guides
- MareNostrum 4, Lenovo System, BSC, Spain <a href="https://www.bsc.es/marenostrum/marenostrum/technical-information-">https://www.bsc.es/marenostrum/marenostrum/technical-information-</a> <a href="https://www.bsc.es/user-support/mn4.php">https://www.bsc.es/user-support/mn4.php</a>
- Piz Daint, Cray XC50 System, ETH Zurich / CSCS, Switzerland <a href="https://www.cscs.ch/computers/piz-daint">https://www.cscs.ch/computers/piz-daint</a> <a href="https://user.cscs.ch/">https://user.cscs.ch/</a>



Applicants may also consider resources made available through the PRACE-ICEI call <a href="https://prace-icei-calls-for-proposals/#AvailableResources">https://prace-icei-calls-for-proposals/#AvailableResources</a>

We estimate that projects with a duration of three to six months and sized from 30 million to 50 million core hours will address the topics appropriately. Nevertheless, this does not preclude projects with other sizes and duration to be awarded.

Applicants may also identify specific additional resource requirements to successfully complete their project, for instance support to adapt their tool chain to the computing and data infrastructure, see e.g. <a href="https://prace-ri.eu/training-support/">https://prace-ri.eu/training-support/</a>.

## 3 Proposal requirements and how to apply

The following elements are expected to be provided by the applicants to describe their proposal:

- Short description of the scientific goals and objectives (1 page)
- Required resources (1/2 page)
- Description of the research methods, algorithms, and tool chain (1/2 page)
- Description of special needs (if any)

To submit proposals, fill out the application form available at

https://prace-ri.eu/wp-content/uploads/PRACE COVID-19 ApplicationForm-v4.docx and send it by email to <a href="mailto:covid-19@prace-ri.eu">covid-19@prace-ri.eu</a>.

#### 4 Review process and criteria

A Review Panel will be established by PRACE and composed of members of the PRACE Access Committee (AC) – which is a group of leading international scientists and engineers – and external experts suggested by the AC members. They will discuss the merit of the proposals, supported by a technical team, based on the criteria listed below.

**Significance of the Proposal**: Is the proposal addressing the scope of the call? Is the expected impact aligned with the objective of the call?

**Soundness of the Methodology and Tools**: Does the request describe appropriate tools, methods, and approaches for addressing the objectives?

**Technical Feasibility**: Are the codes and tools already available and tested on the target systems or is there a reasonable plan to achieve that quickly?